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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,729	02/18/2004	Yasumasa Morimoto	60866 (48882)	3394

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EXAMINER	
MORRISON, THOMAS A	
ART UNIT	PAPER NUMBER
3653	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/782,729	MORIMOTO ET AL.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) *5,6 and 8-11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/13/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: (1) the recited "engaged the engagement piece" in line 9 should be -- engaged with the engagement piece --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 1-4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: **(1)** the structure of the stopper member "permitting pivoting displacement of the at least one stopper member", as set forth in claim 1; **(2)** the structural relationship between the pickup roller, the stopper member and engagement piece that allows the position of the pickup roller to cause engagement between the stopper member and the engagement piece, as set forth in claim 7; and **(3)** the structure of the stopper member "permitting pivoting displacement of the stopper member", as set forth in claim 7.

Claim 1 recites the limitation "the at least one stopper member" in lines 39-40. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the stopper member or members" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 7, it is unclear what is meant by the recitation "a pickup arm disposed in the outer casing member so as to permit displacement in pivoting fashion about **one or more shafts** arranged in **one or more directions** perpendicular to at least **one of** the original transport **direction or directions**." (emphasis added).

Claim 7 recites the limitation "the original transport direction or directions " in lines 28-29. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 7, as best understood, are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art FIGS. 21-25 of the instant application.

Regarding claim 1, Figs. 21-25 of the instant application show an original transport apparatus automatically taking up one or more originals (11) one sheet at a time from a loading tray (10) and transporting the sheet toward a transport path, the apparatus including

a tray (10) for loading the originals (11), the tray (10) being inclined downward and having a lower tip region (near 4);

an outer casing member (1) arranged above the lower tip region (near 4);

a first shaft (2) positioned perpendicular to a direction of sheet transport (X);

the outer casing member (1) disposed so as to permit opening and closing about the first shaft (2);

a stopper member (4) positioned in the lower tip region (near 4) of the tray (10) against which the originals (11) can abut and align prior to transport;

an engagement piece (9) disposed in the outer casing member (1) on a second shaft (9c) positioned perpendicular to the direction of sheet transport (X) so as to permit independent pivotal displacement thereof;

the stopper member (4) causing a lead edge of the sheet (11) to stop at a prescribed location (Fig. 21);

the engagement piece (9) being capable of engaging with the stopper member (4);

wherein, when the outer casing member (1) is closed and the apparatus is in an original takeup standby state (Fig. 21), engagement of the stopper member (4) by the engagement piece (9) causes the stopper member (4) to be retained in a position in which the stopper member (4) stops the lead edge of the sheet (11) at the prescribed

location (Fig. 21), thereby constraining the lead edge at the prescribed location (Fig. 21) and preventing entry of the sheet into the transport path; and

wherein, when the outer casing member (1) is closed and takeup of the sheet (11) is proceeding (Fig. 22), the engagement piece (9) is displaced in pivoting fashion, thereby disengaging engagement between the engagement piece (9) and the stopper member (4), permitting pivoting displacement of the at least one stopper member (4) and allowing transport of the sheet (11).

Regarding claim 7, Figs. 21-25 show an original transport apparatus automatically taking up one or more originals (11) one sheet at a time from a loading tray (10)and transporting the sheet (11) toward a transport path, the apparatus including

a tray (10) for loading the originals (11), the tray (10) being inclined downward and having a lower tip region (near 4);

an outer casing member (1) arranged above the lower tip region (near 4);

a first shaft (2) positioned perpendicular to a direction of sheet transport;

the outer casing member (1) disposed so as to permit opening and closing about the first shaft (2);

a stopper member (4) positioned in the lower tip region (near 4) of the tray (10) against which the originals (11) can abut and align prior to transport;

an engagement piece (9) disposed in the outer casing member (1) on a second shaft (9c) positioned perpendicular to the direction of sheet transport so as to permit independent pivotal displacement thereof;

the stopper member (4) causing a lead edge of the sheet (4) to stop at a prescribed location (Fig. 21);

the engagement piece (9) being capable of engaging with the stopper member (4);

a pickup arm (6) disposed in the outer casing member (1) so as to permit displacement in pivoting fashion about one or more shafts (5) arranged in one or more directions perpendicular to at least one of the original transport direction or directions;

the pickup arm (6) having a pickup roller (R1) for taking up the sheet (11) from the tray (10);

wherein, when the outer casing member (1) is closed and the apparatus is in an original takeup standby state (Fig. 21), the fact that the pickup roller (R1) is positioned in an upper region within the outer casing member (1) causes engagement to be retained between the stopper member (4) and the engagement piece (9), constraining a location of the lead edge of the sheet (11) and preventing entry of the sheet (11) into the transport path; and

wherein, when the outer casing member (1) is closed and takeup of the sheet (11) is proceeding (Fig. 22), the pickup arm (6) is displaced downward to cause the

pickup roller (R1) to move downward and away from the outer casing member (1) so as to not be hidden thereby, and linked with the downward displacement of the pickup arm (6), the engagement piece (9) is displaced in pivoting fashion, thereby disengaging engagement between the engagement piece (9) and the stopper member (4), permitting pivoting displacement of the stopper member (4) and allowing transport of the sheet.

4. Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Publication No. 20020074711 (Higaki).

Regarding claim 1, Figs. 1-7 show an original transport apparatus automatically taking up one or more originals ((Fig. 4(a)) one sheet at a time from a loading tray (including 15 in Fig. 4a and 15 in Fig. 1) and transporting the sheet toward a transport path, the apparatus including

a tray (including 15 in Fig. 4a and 15 in Fig. 1) for loading the originals, the tray (including 15 in Fig. 4a and 15 in Fig. 1) being inclined downward and having a lower tip region (near 15 in Fig. 4(a));

an outer casing member (10a) arranged above the lower tip region (near 15 in Fig. 4(a));

a first shaft (10c) positioned perpendicular to a direction of sheet transport;

the outer casing member (10a) disposed so as to permit opening and closing about the first shaft (10c)(see, e.g., Fig. 7);

a stopper member (60) positioned in the lower tip region (near 15 in Fig. 4(a)) of the tray against which the originals can abut and align prior to transport;

an engagement piece (61) disposed in the outer casing member (10a) on a second shaft (18b) positioned perpendicular to the direction of sheet transport so as to permit independent pivotal displacement thereof;

the stopper member (60) causing a lead edge of the sheet to stop at a prescribed location (Fig. 4(a));

the engagement piece (61) being capable of engaging with the stopper member (60);

wherein, when the outer casing member (10a) is closed and the apparatus is in an original takeup standby state (Fig. 4(a), engagement of the stopper member (60) by the engagement piece (61) causes the stopper member (60) to be retained in a position in which the stopper member (60) stops the lead edge of the sheet at the prescribed location (Fig. 4(a)), thereby constraining the lead edge at the prescribed location and preventing entry of the sheet into the transport path; and

wherein, when the outer casing member (10a) is closed and takeup of the sheet is proceeding (Fig. 4(c)), the engagement piece (61) is displaced in pivoting fashion, thereby disengaging engagement between the engagement piece (61) and the stopper member (60), permitting pivoting displacement of the at least one stopper member (60) and allowing transport of the sheet.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0074711 (Higaki) as applied to claim 1 above, and further in view of U.S. Patent No. 2002/0033572 (Takisawa et al.). U.S. Patent Publication No. 2002/0074711 discloses most of the limitations of claim 2. In fact, U.S. Patent Publication No. 2002/0074711 shows a stopper (60) that is pivotally mounted within an outer casing member (10a) via a shaft. However, this publication does not specifically show that such mounting includes an arm member.

Figs. 12a-12b of U.S. Patent Publication No. 2002/0033572 show that it is well known to provide a paper feeder with a mounting member (121) having an arm member (near 122) that is mounted and supported by an outer casing member (126); and a third shaft (122) at a second end of the arm member (near 122), to which a stopper member (including 18) is pivotally secured. Moreover, the numbered paragraph [0089] of U.S. Patent Publication No. 2002/0033572 explains that such arrangement makes it is possible to improve workability of the device and to reduce the production time required for the assemby process via this pre-assembled mounting member 121. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of U.S. Patent Publication No. 2002/0074711 with a pre-

assembled mounting member having an arm and a shaft for mounting a stopper, in order to improve workability and reduce production time required for assembly, as taught by U.S. Patent Publication No. 2002/0033572. Providing the pre-assembled mounting member in a manner as taught by U.S. Patent Publication No. 2002/0074711 will result in the pre-assembled mounting member being positioned within the outer casing member. See, e.g., Figs. 1-4(d) of U.S. Patent Publication No. 2002/0074711. Thus, this combination meet all of the limitations of claim 2.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The fact that not all of the claims have been rejected in view of prior art does not indicate that such claims contain allowable subject matter, particularly in view of the rejections under 35 U.S.C. 112, second paragraph outlined above.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

06/25/2006

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